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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/597,160	06/20/2000	Takayuki Sugahara	1994/00007	5142

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EXAMINER
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HOFFMAN, BRANDON S

ART UNIT	PAPER NUMBER
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2136

DATE MAILED: 01/14/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/597,160

Applicant(s)

SUGAHARA, TAKAYUKI

Examiner

Brandon Hoffman

Art Unit

2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-8 are pending in this office action, claims 5-8 are newly added.
2. Applicant's arguments, see page 13-15, filed November 25, 2003, have been fully considered but they are not persuasive.

### *Rejections*

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

4. Claims 1, 2, 4-6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano (U.S. Patent No. 6,510,233) in view of Wakasu (U.S. Patent No. 6,453,053).

Regarding claims 1, 4, 5, and 8, Nakano teaches a recording apparatus/method of an electronic watermark comprising (fig. 1):

- Means for detecting a first electronic watermark signal from original contents data inputted (fig. 1, ref. num 180),
- Memory means for temporarily storing the first electronic watermark signal detected by said detecting means (fig. 1, ref. num 170); and
- Inserting means for recording a second electronic watermark signal (fig. 1, ref. num 130) having a content that is equivalent to that of the first electronic

watermark signal detected by said detecting means (fig. 1, ref. num 180) in the contents data extracted by said extracting means.

Nakano does not teach wherein the first electronic watermark signal is intermittently recorded during every interval of a plurality of information units of the original contents data; and extracting means for extracting a part of the contents data from the original contents data, wherein the part of contents includes/excludes the first electronic watermark signal.

Wakasu teaches wherein the first electronic watermark signal is intermittently recorded during every interval of a plurality of information units of the original contents data (col. 8, lines 31-36 and lines 39-41); and extracting means for extracting a part of the contents data from the original contents data (fig. 2, ref. num 206 and col. 9, lines 13-23), wherein the part of contents includes/excludes the first electronic watermark signal (col. 9, lines 13-16).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine extracting means and intermittently recording the first electronic watermark data over a plurality of units, as taught by Wakasu to the method/apparatus of Nakano. It would have been obvious to combine extracting means and intermittently recording the first electronic watermark data over a plurality of units, as taught by Wakasu, to the method/apparatus of Nakano because the extracting

means extracts the portions of data containing the electronic watermark data so that the portions can be combined and tested against a second watermark to see if the watermark is valid (see col. 10, lines 16-33 of Wakasu). It would have been obvious to intermittently record the first electronic watermark data over a plurality of units because MPEG data is represented in frames; watermarking portions of each frame saves time over watermarking the entire frame.

Regarding claims 2 and 6, Nakano as modified above by Wakasu, teaches further comprising:

- Deciding means for judging whether or not the second electronic watermark exists (see fig. 1, ref. num 180 and col. 7, lines 18-21 and 26-31 of Nakano); and
- Switching means for switching an output in accordance with a result of judgment by said deciding means (see fig. 1, ref. num 190 of Nakano).

Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakano (U.S. Patent No. 6,510,233) as modified by Wakasu (U.S. Patent No. 6,453,053), and further in view of Yoshida et al. (U.S. Patent No. 6,449,378).

Nakano as modified above by Wakasu teaches further comprising:

- MPEG encoder means (see fig. 1, ref. num 113 and 114 of Wakasu), and
- MPEG decoder means (see fig. 2, ref. num 201 and 202 of Wakasu).

Nakano/Wakasu does not teach another inserting means for receiving an intra-coded picture location signal from the MPEG encoder means, wherein said inserting means records the first electronic watermark signal in case the original contents data is an intra-picture.

Yoshida et al. teaches another inserting means for receiving an intra-coded picture location signal from the MPEG encoder means, wherein said inserting means records the first electronic watermark signal in case the original contents data is an intra-picture (col. 1, lines 55-62).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine another inserting means for receiving an intra-coded picture location signal from the MPEG encoder means, wherein the inserting means records the first electronic watermark signal in case the original contents data is an intra-picture, as taught by Yoshida et al., to the method of Nakano/Wakasu. It would have been obvious to combine another inserting means for receiving an intra-coded picture location signal from the MPEG encoder means, wherein the inserting means records the first electronic watermark signal in case the original contents data is an intra-picture, as taught by Yoshida et al., with the method of Nakano/Wakasu because inserting an electronic watermark in case the original contents data is an intra-coded picture would allow the watermarking process to be much faster.

The intra-coded pictures are assigned at the beginning of each 15-frame GOP (group of pictures) (Yoshida, column 1, lines 55-62). By watermarking only the intra-coded frames, the other 14 frames in a group of pictures (GOP), based on their dependency on the intra-coded frame, are watermarked. This saves a significant amount of time in comparison to watermarking all 15 frames in a GOP.

### **Response to Arguments**

5. Applicant amends claims 1-4, and adds claims 5-8.
6. Applicant argues:
  - a. Independent claims 1 and 4 are not taught by the combination of Nakano in view of Wakasu based on the memory means of Nakano (see page 13, paragraph 6)
  - b. Independent claims 1 and 4 are not taught by the combination of Nakano in view of Wakasu based on the electronic watermark burying unit of Nakano (see page 13, last paragraph through paragraph 2)
  - c. Independent claims 1 and 4 are not taught by the combination of Nakano in view of Wakasu based on the extracting means of Wakasu (see page 14, last paragraph through page 15, paragraph 2).

Regarding argument (a), examiner disagrees with applicant. Nakano discloses (col. 7, lines 23-31) that the BUFFER 170 is transferred to the output image with a watermark already embedded into the image based on the decision of the

WATERMARK DETECTOR 180. Therefore, the BUFFER 170, can and will store watermarked image data received from the input image.

Regarding argument (b), examiner disagrees with applicant. Nakano discloses (col. 7, lines 17-22) that the ELECTRONIC WATERMARK BURYING UNIT 130 inserts the ELECTRONIC WATERMARK DATA 140 into the image data. This buried data is then compared by the ELECTRONIC WATERMARK DETECTOR 180 to confirm if the watermarked data is the same, in the original input image, as the watermark data that is inserted by the ELECTRONIC WATERMARK BURYING UNIT 130. Therefore, the content of the original input image data is tested to see if the newly embedded watermark data is the same.

Regarding argument (c), examiner disagrees with applicant. Wakasu discloses (col. 9, lines 13-23) that the ELECTRONIC WATERMARK DATA EXTRACTOR 206 extracts the image data from the parts that contain electronic watermark data. This leaves parts of the image data that do not include electronic watermark data. Therefore, contents data extracted by the ELECTRONIC WATERMARK DATA EXTRACTOR 206 contains a part of the first electronic watermark signal.

### Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office Action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP §



706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon Hoffman whose telephone number is 703-305-4662. The examiner can normally be reached on M-F 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 703-305-9648. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

*Brandon Hoff*

*Emmanuel L. Moise*  
EMMANUEL L. MOISE  
PRIMARY EXAMINER

BH

December 30, 2003